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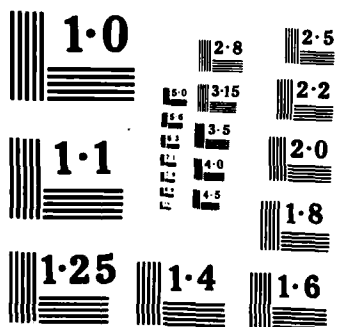
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Andrew H. Van de Ven  
University of Minnesota

Gordon Walker  
Massachusetts Institute of Technology

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COORDINATION

Andrew H. Van de Ven  
University of Minnesota

Gordon Walker  
Massachusetts Institute of Technology

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Revised November 1984  
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Andrew H. Van de Ven is 3M Professor of Human Systems Management in the School of Management of the University of Minnesota. Gordon Walker is Assistant Professor of Management in the Sloan School of the Massachusetts Institute of Technology.

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# ABSTRACT

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A theory was developed on the creation, growth, and decline of relationships among organizations and was tested, using a longitudinal study of 95 dyadic relationships among child care and health organizations in Texas. Using LISREL V, the test of the theory showed that substantial revision of the model was required to adequately explain the data. When the model was revised, important new patterns were revealed in the development of interorganizational relationships over time: (1) Perceptions of dependence on others for resources spurs the development of interorganizational relationships. Resource dependence is a powerful direct determinant of communications, resource transactions, and consensus; (2) The growth of interorganizational relationships is fostered by frequent communications to formalize the relationship and build consensus about the terms of the relationship among the parties involved; (3) Monetary transactions and client referrals entail different patterns of coordination; and (4) Consensus among parties in an interorganizational relationship is both a positive outcome of initial resource dependence and communications and has a negative influence on subsequent perceptions of resource dependence.

## INTRODUCTION

While many interorganizational relationships (IRs) consist of formally structured arrangements for coordination, an even larger amount of coordination occurs in the form of short term, ad hoc efforts at coordination between pairs of organizations. Although this unstructured form of IR is frequently overlooked, it is of great importance not only because of its pervasiveness, but also because it often represents the embryonic stage in the development of IRs. Indeed, if one is to understand the dynamics of IRs over time, it is necessary to begin with ad hoc coordination efforts between organizations, and to track how they are created, grow, and dissolve over time.

One form that these initial ad hoc efforts to create IRs is called "mobilization coordination" (Warren, Rose, and Bergunder, 1974). It focuses on the activities that are set in motion by a single organization which has a particular objective for which it must gain support, cooperation, or resources from a number of other organizations. Here, the agent of an organization mobilizes other pertinent organizations -- or parts of them -- around its own objectives. In other words, the organizational agent is an entrepreneur who gathers together the resources and forges the ad hoc relationships needed to enable his or her organization to pursue its own objectives. As Warren and his associates (1977) point out, this ad hoc mobilization is an important source of coordination, although it is frequently overlooked because of an implicit equating of coordination with "structured coordination alone."

The longitudinal research reported here examined the mobilization coordination efforts initiated by fourteen early childhood development (ECD) organizations. These ECD agencies were initially sponsored by a Texas state department to plan and implement new service programs that would respond to unmet social needs of children from the ages of zero to six and their families in fourteen different, local Texas counties and communities. These ECD organizations began to plan their programs and services in January 1973, completed their first year of program implementation in September 1974, and became financially independent from the Texas state agency by August 1976.

Since the state agency did not provide the ECD organizations all the resources needed to plan and operate their child care programs, and because their contract with the state agency for financial support expired in August 1976, the ECD organizations' directors recognized they needed the support of other organizations in order to survive. During the period examined here (1973 - 1976) preparation for survival implied the need for the ECD agencies to become integrated into the human service delivery systems in their respective communities. The two most important kinds of resources that the ECD agencies needed in order to sustain ongoing operations were funding and client referrals.

The acquisition of financial resources from other organizations was basic to the survival of the ECD organizations. Most provided services to economically deprived families on a sliding fee-for-service scale based on the family's ability to pay. The remainder of the funds to cover the actual costs of operating the child and health care organizations had to be obtained from voluntary contributions in the local community that were matched (according to a legislated formula) by federal Title XX funds for child care. In addition to obtaining matching funds, to be eligible

for Title XX funds, the ECD organizations were required to obtain licensing approval and meet stringent child and health care service standards that were administered by county departments of public welfare and public health.

Thus, unlike business organizations, in which financial survival is dependent on sales of products and services at a profit, these not-for-profit organizations provided their services at a loss, and their survival was directly linked to their ability to obtain external funding. Indeed, it was observed that the yearly pressing necessity to generate external funding was an overwhelming and ongoing concern of many directors of the ECD organizations.

The second major resource that the ECD organizations needed to operate on an ongoing basis was client referrals. Depending on the kind of services provided by an ECD organization, client referrals may have meant obtaining children for day care centers, patients for neo-natal health care screening programs, or families for parent education and nutrition education programs. In addition, some children, patients, or families served by these programs had unique problems that required referral to other organizations for specialized health care, educational development, or psychological care.

In this context, a longitudinal study was conducted that examined the mobilization coordination efforts of the fledgling ECD organizations with other agencies in March 1974, January 1975, and August 1976. In each wave of data collection, a standardized questionnaire was completed by the ECD organization directors and by representatives of other agencies with which the ECD programs were involved while planning and implementing their child and health care services. The primary objective in studying

these dyadic relationships over a period of two-and-a-half years was to evaluate systematically a theory on how and why mobilization coordination among these organizations emerged, and what kinds of structures and processes are necessary for maintaining effective dyadic relationships over time.

#### THEORETICAL FRAMEWORK

Figure 1 presents the hypothesized structural equations in the theory developed to explain the initial creation, growth, and decline of pairwise interorganizational relationships (IR's). For ease of reading, the structural equations are presented in truncated form, with the error terms and equations for the exogenous variables not specified (but assumed). The time subscripts (t1, t2, t3) refer to the period in which the variables were observed in the three data collection waves on which the theory was tested. We thought, however, that using these time periods (discussed at greater length in the methodology section) would be sufficiently short to capture key events in the mobilization of these IR's, but sufficiently long to permit the hypothesized causal processes to work out among key variables in the model. Given the absence of prior theorizing and longitudinal research on the development of IR's had no basis on which to establish the time lags between data collections.

--INSERT FIGURE 1 HERE--

#### The Creation of Dyadic IRs

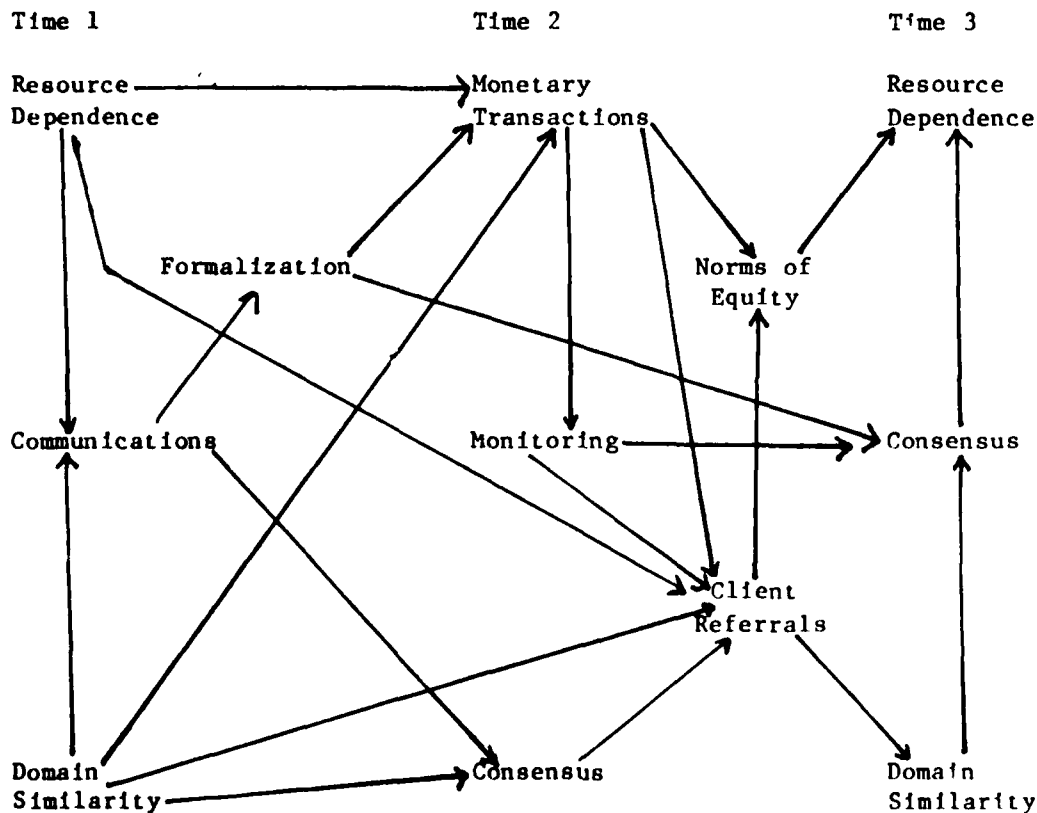
If one accepts Gouldner's (1959) premise that organizations strive to maintain their autonomy, why should organizations become involved in an IR? Autonomy means that organizations are capable of choosing the course of action they want to pursue (Levine and White, 1961; Clark and Wilson, 1961).

Figure 1

Hypotheses on the creation, growth, and decline of pairwise interorganizational relationships

Hypotheses

1. Communications t1 = dependence t1 + domain similarity t1
2. Formalization t1 = communications t1
3. Monetary transactions t2 = dependence t1 + formalization t1 + domain similarity t1
4. Monitoring t2 = monetary transactions t2
5. Consensus t2 = communications t1 + domain similarity t1
6. Client referrals t2 = dependence t1 + domain similarity t1 + consensus t2 - monetary transactions t2 + monitoring t2
7. Equity t3 = monetary transactions t2 + client referrals t2
8. Dependence t3 = equity t3 + consensus t3
9. Consensus t3 = -Formalization t1 - monitoring t2 + domain similarity t3
10. Domain similarity t3 = client referrals t2



From an organization's point of view, to become involved in an IR implies (1) that it loses some of its freedom to act independently when it prefers to maintain control over its domain and affairs, and (2) that it must invest its scarce resources and energy to develop and maintain a relationship with another organization when the potential returns on this investment are often unclear or intangible.

Thus, organizational parties prefer not to become involved in an IR unless they are compelled to do so, either because of a scarcity (or a perceived dependence on others to obtain resources) or because of specialization, which requires organizations to fulfill unique obligations placed on them (Cook, 1977).

A second factor important for understanding what kinds of organizations are likely to engage in a dyadic relationship is domain similarity, defined as the degree to which organizations have the same services, clients, and personnel skills. The evidence is conflicting on whether domain similarity helps or hinders the establishment of an IR (Van de Ven, 1976; Cook, 1977). At the low extreme of domain similarity, organizations have little in common and are not likely to initiate communications with each other. When organizations have moderately similar domains, they are likely to have complementary resources, which motivates them to communicate more frequently, in order to negotiate quid pro quo arrangements that are mutually beneficial to the parties involved. Furthermore, organizations with moderately similar professional skills, clients, and services represent a common culture of shared meanings, which facilitates communications.

But as domain similarity increases, the potential for territorial disputes and competition also increases. If organizations have highly similar domains, they are also likely to need the same kinds of resources, which reduces the potential benefits of making exchanges. Thus, having

highly similar domains hinders the potential for an IR to emerge between organizations. The maximum inducement to form an IR occurs when the organizations have some degree of similarity--not identity--in the nature of resources available for exchange. Therefore, as hypothesis 1 indicates, domain similarity and resource dependence were hypothesized to stimulate interorganizational communications at t1.

The nature of these communications will differ, of course, depending on whether the IR is created for monetary transactions or client referrals. Procedures and requirements for obtaining money from funding agencies tend to be impersonally codified, institutionalized, and published. As a result, the effect of communications between a funding agency and a requesting organization is to determine how well the latter meets the formal agreements and criteria that are necessary to obtain funds (hypothesis 2). Interpersonal contacts and informal agreements between representatives of funding and requesting agencies are less important; indeed, they are often sanctioned, because a particularistic relationship may impair the objective and impartial criteria that funding agencies use in resource allocation decisions and in subsequently monitoring the use of those funds. Therefore, it was hypothesized that monetary transactions in t2 would be a function of resource dependence and formalization of the agreement at t1, which specifies the contractual terms of the IR (hypothesis 3).

To ensure that these terms are adhered to, funding agencies monitor the recipient's use of its funding allocations. In human services, these monitoring procedures generally include requirements that the recipient submit periodic fiscal and performance reports to the funding agency and that funding agency representatives can make periodic site visits to the organization. These monitoring visits often have the dual

purposes of evaluating contract compliance and providing technical assistance and training in the areas of organization and client services to members of the funded organization. Because the funding agency presumably wants to account for and enhance its investments, we expected that the greater the resource transactions, the greater would be the monitoring efforts by the funding agency (hypothesis 4).

IR's established for the purpose of referring client (as opposed to exchanging money) tend to develop on a case-by-case basis, are less formalized, and rely more on personal knowledge and trust among the interacting parties that particular clients will receive proper service. Thus, the perceived necessity to refer a client elsewhere for service (dependence) and recognition of alternatives (domain similarity) give rise to an organization seeking another that it can agree with and trust, which in turn is the product of communications (Schelling, 196<sup>0</sup><sub>8</sub>; Scheff, 1967). But, as Berger and Luckmann (1966) noted, in the process of communication, one's agreement with and trust in another are transformed over time into collective phenomena of consensus (hypothesis 5).

There is a convergence on this basic proposition in theories of exchange and symbolic interaction when communication is viewed as an "adjustment process" (Warriner, 1970) through which individuals collectively shape their relationship (Singlemann, 1972).

Through frequent communications, individuals develop collective meanings and definitions of their situation, and this consensus makes transactions possible, because "common definitions of situations produce similar actions" (Olsen, 1978: 106). In the case of client referrals, this consensus emerges informally through communications on individual cases. Furthermore, this consensus is never fully and completely defined, because

As hypothesis 1 suggests, communication frequency at time 1 was significantly explained by resource dependence but, contrary to expectations, not by domain similarity. As predicted in hypothesis 3, monetary transactions at time 2 were significantly explained by resource dependence and formalization in time 1 but, unexpectedly, not by domain similarity. As predicted, consensus among IR parties at time 2 significantly increased with communications at time 1 but, again, not by domain similarity, as hypothesis 5 proposed. Three of the five factors used to predict client referrals in hypothesis 6 were supported (resource dependence, domain similarity at time 1, and monitoring at time 2), while no support existed for monetary transactions and consensus at time 2. Perceptions of resource dependence at time 3 were significantly explained by consensus but, contrary to hypothesis 8, not by norms of equity. Finally, norms of equity and consensus at time 3 were not explained by any of the factors hypothesized in hypotheses 7 and 9.

Overall, the model had a poor incremental fit index. The chi-square value for the null model was 1714.16, and the value for the theory tested here is 610.64, indicating a fit index of .64. Thus a major part of the structural equation model was rejected. Most of negated parts of the overall model involved three poorly measured constructs (domain similarity at t1 and t3 and norms of equity at t3), which rendered only partial or no support for seven of the ten hypotheses in the model. In addition, consensus at time 2 was shown to have poor predictive validity.

#### The Revised Model

This test of the proposed theory shows that, although most of the measurement model and part of the structural equation model was not rejected, the theory did not fit the data to an acceptable degree. We

correlations among these composite dimensions within and across time periods. The intercorrelation matrix demonstrates a consistency over time of the within-time-period pattern of relationships among the variables, as well as strong autocorrelations and relationships between different variables in different time periods. The autocorrelations indicate that each dimension of an IR is related to itself over time; as one might expect, the past is a strong predictor of the future.

The LISREL estimates of the measurement parameters in the proposed model are shown in Table 4. These results show excellent measurement properties for communications, formalization, and consensus (in both the first and second time periods). Although, resource dependence is less well measured. In both the first and third time periods the dependence of the member agency on the local organization was not as good an indicator of resource dependence as the focal agency's dependence on the member organization. The variance explained in member-agency dependence, however, was considered sufficient to retain this measure as an indicator of the construct. Likewise, the measurement of domain similarity at time 1 was marginally acceptable. Domain similarity in the third time period, however, was unrelated to one of its indicators, and norms of equity had poor measurement properties.

<sup>and Table 5</sup>  
Figure 2<sub>1</sub> present the test results of the structural equation model.

The findings for the individual hypotheses were mixed. Unequivocal support was obtained for two hypotheses in the model: the formalization of an IR is significantly explained by communications at time 1 (hypothesis 2), and monitoring of IR's significantly increases with monetary transactions at time 2 (hypothesis 4). Partial support was obtained for another six of the ten hypotheses in the model, but no support was found for two of them.

Table 3

Correlation matrix across time for composite variables

Variable	Time 1									Time 2									Time 3								
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
1 Resource dependence	1.00																										
2 Consensus	0.64	1.00																									
3 Domain similarity	0.24	0.23	1.00																								
4 Communications	0.37	0.23	0.13	1.00																							
5 Formalisation	0.47	0.35	0.06	0.47	1.00																						
6 Norms of equity	0.70	0.50	0.06	0.53	0.44	1.00																					
7 Money transactions	0.52	0.24	0.00	0.41	0.50	0.23	1.00																				
8 Client transactions	0.33	0.23	0.41	0.44	0.17	0.22	0.13	1.00																			
9 Monitoring	0.69	0.44	0.18	0.60	0.46	0.57	0.43	0.47	1.00																		
1 Resource dependence	0.75	0.42	0.28	0.45	0.44	0.52	0.44	0.23	0.46	1.00																	
2 Consensus	0.43	0.61	0.16	0.32	0.35	0.59	0.23	0.24	0.41	0.44	1.00																
3 Domain similarity	0.01	0.09	0.42	0.10	-0.00	-0.04	0.11	0.38	0.21	0.24	-0.03	1.00															
4 Communications	0.58	0.35	0.27	0.61	0.36	0.45	0.22	0.43	0.58	0.57	0.36	0.21	1.00														
5 Formalisation	0.48	0.31	0.08	0.43	0.65	0.37	0.44	0.15	0.44	0.70	0.27	0.11	0.48	1.00													
6 Norms of equity	0.48	0.55	0.16	0.28	0.50	0.60	0.18	0.30	0.40	0.57	0.68	0.02	0.42	0.34	1.00												
7 Money transactions	0.49	0.17	-0.03	0.37	0.53	0.37	0.63	0.04	0.40	0.64	0.23	0.05	0.31	0.59	0.18	1.00											
8 Client transactions	0.24	0.15	0.51	0.21	-0.08	0.10	-0.10	0.57	0.09	0.25	0.04	0.54	0.38	0.06	0.12	-0.00	1.00										
9 Monitoring	0.59	0.40	0.22	0.45	0.42	0.36	0.37	0.24	0.54	0.62	0.33	0.33	0.50	0.41	0.32	0.40	0.28	1.00									
1 Resource dependence	0.40	0.20	0.42	0.47	0.14	0.33	0.07	0.58	0.55	0.47	0.17	0.43	0.44	0.22	0.25	0.20	0.42	0.42	1.00								
2 Consensus	0.37	0.38	0.31	0.28	0.09	0.41	0.15	0.42	0.47	0.31	0.39	0.10	0.12	0.03	0.26	0.11	0.14	0.18	0.60	1.00							
3 Domain similarity	0.26	0.11	0.43	0.24	-0.00	0.09	0.08	0.41	0.74	0.14	0.05	0.38	0.20	0.05	0.00	0.04	0.42	0.34	0.36	0.13	1.00						
4 Communications	0.41	0.19	0.13	0.57	0.14	0.39	0.26	0.41	0.31	0.30	0.21	0.10	0.40	0.04	0.16	0.05	0.25	0.27	0.46	0.30	0.36	1.00					
5 Formalisation	0.48	0.24	0.04	0.18	0.40	0.27	0.45	0.10	0.41	0.53	0.22	0.10	0.24	0.48	0.16	0.52	-0.14	0.35	0.31	0.27	0.13	0.16	1.00				
6 Norms of equity	0.45	0.38	0.23	0.36	0.28	0.26	0.31	0.36	0.40	0.30	0.30	-0.01	0.33	0.11	0.21	0.17	0.16	0.22	0.41	0.55	0.14	0.47	0.26	1.00			
7 Money transactions	0.36	0.13	-0.10	0.19	0.29	0.31	0.58	-0.05	0.18	0.54	0.11	-0.00	0.09	0.31	0.09	0.57	-0.14	0.25	0.28	0.23	0.05	0.23	0.59	0.16	1.00		
8 Client transactions	0.28	0.14	0.44	0.47	-0.03	0.24	0.07	0.63	0.28	0.08	0.02	0.31	0.37	-0.05	0.01	-0.06	0.63	0.22	0.56	0.20	0.60	0.53	-0.02	0.35	0.04	1.00	
9 Monitoring	0.53	0.25	0.13	0.49	0.27	0.36	0.48	0.23	0.54	0.49	0.22	0.14	0.39	0.25	0.20	0.34	0.08	0.52	0.49	0.37	0.33	0.48	0.42	0.41	0.41	0.37	1.00

Time 1

Time 2

Time 3

Table 2

Differences between time periods for each variable						
Variable	Time 1		Time 2		Time 3	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Resource dependence	3.83	.97	3.78	.93	3.57	.69
Consensus	3.66	1.53	3.94	1.16	3.67	1.53
Domain similarity	2.48	1.20	2.80	1.05	2.84	1.06
Communications	3.23	1.82	2.92	1.79	3.26	1.59
Formalization	2.83	2.16	1.96	2.03	2.28	2.01
Effectiveness	4.06	1.12	4.18	.89	3.97	1.09
Monetary transactions	4.02	2.41	3.86	2.04	3.9	2.12
Client referrals	4.59	2.88	4.91	2.57	5.06	2.28
Monitoring	6.69	2.53	7.07	2.23	6.22	2.08

theory contribute significantly to improving the model's fit to the data. LISREL produces a chi-square statistic that indicates the degree of overall fit between the actual and predicted covariances among the variables. The lower the statistic, the better the fit.

A sample size of 95 cases is substantially less than Lawley and Maxwell's (1972) rule of thumb for accepting the chi-square test of a model's absolute fit to the data, in which the number of cases should be 50 more than  $[n(n+1)/2]$ , where  $n$  is the number of manifest variables. As an alternative, the theory was evaluated using the incremental fit index developed by Bentler and Bonett (1981), and used by Bagozzi and Phillips (1982). The incremental fit index measures the extent to which the explanatory power of the null model is improved by an alternative theory. In the present research, the alternative theory is the proposed model shown in Figure 1. In practice, the improvement is considered significant when the index exceeds .9. In the present study the null model consists of the variances of the manifest variables alone; no latent variables are specified. The alternative theory, however, contains both the measurement and structural equation models, with error terms autocorrelated for resource dependence, domain similarity, and consensus as latent variables. The alternative (proposed) model was tested with all latent variables specified as endogenous to allow for the autocorrelation of error terms, and the null model was estimated in the same way. The error terms for resource dependence and domain similarity were then fixed at one to identify the model.

## RESULTS

Table 2 shows the means and standard deviations across the three time periods of unweighted additive composites for each latent variable constructed from its indicators, and Table 3 shows the simple

IR's. This test was not feasible, however, because of the small number of terminated relationships.

Our qualitative approach to this problem involved testing the theory on two samples, the first consisting of both terminated and non-terminated IR's and the second of only the nonterminated relationships. By comparing the parameter estimates and levels of overall fit of the two samples, the significance of the terminations could be roughly evaluated. The results of this comparison indicated no substantial difference between the applicability of the theory to the overall sample and its applicability to the sample without the terminated IR's.

#### Model Testing Procedures

The theory constitutes a longitudinal multiple-indicator structural equation model (Joreskog, 1977), in which the hypotheses represent causal relationships among latent variables, most of which are indicated by more than one manifest variable. The relationships among the latent variables constitute what is normally called the structural equation part of the overall model, and the relationships between the manifest variables and latent variables constitute the measurement part.

The model was tested using LISREL V, a full-information maximum likelihood procedure (Joreskog and Sorbom, 1982), for three reasons. First, LISREL estimates the measurement and structural equation models tested simultaneously, thus allowing for the concurrent assessment of the convergent, discriminant, and nomological validity of the latent variables (Bagozzi and Phillips, 1982). A second advantage of the technique is its ability to estimate path coefficients for structural equations with correlated error terms (Markus, 1979, Ch. 3; Tuma and Hannan, 1982). Third, the technique can be used to assess the extent to which parts of a

Table 1

---

List of indicators for each variable

---

Resource dependence at time 1

1. FA depends on MA
2. MA depends on FA

Domain similarity at time 1

3. FA MA provide same services
4. FA MA serve same clients

Communications at time 1

5. Frequency of written communications
6. Frequency of phone calls

Formalization at time 1

7. Extent agreement written
8. Extent agreement legal

Consensus at time 2

9. Pairwise agreement on service goods
10. Pairwise agreement on the way FA provides services

Monetary transactions at time 2

11. Total amount of money flows

Client referrals at time 2

12. Total amount of client referrals

Monitoring at time 2

13. Total amount of technical assistance

Resource dependence at time 3

14. Same as 1
15. Same as 2

Consensus at time 3

16. Same as 9
17. Same as 10

Domain similarity at time 3

18. Same as 3
19. Same as 4

Norms of equity at time 3

20. Extent to which relationship is perceived productive
  21. Extent to which relationship is perceived worthwhile
-

The indices used to measure the dimensions of dyadic IR's are presented in Table 1. All but three variables--monetary transactions, client referrals, and monitoring--were measured by two indicators or manifest variables. These indicators are a subset of those developed by Van de Ven and Ferry (1980) to assess pairwise interorganizational relationships.

Several data collection procedures complicated the analysis. First, as with most longitudinal studies, some member-agency respondents stopped participating before the final data collection wave, although all 14 focal-agency respondents participated in all data collection waves. Usually this problem is defined as one of missing data; the generalizability of the results can therefore be assessed by testing for systematic differences between those who left and those who remained in the study (Kohn & Schooler, 1978). But cessation of participation in the study may also have indicated termination of the IR, an event that has substantive relevance for the theory presented above. Thus, terminated IR's were measured in the focal-agency questionnaire in the second and third waves. Of the 95 IR's for which usable data were collected, none were terminated before the second period, but 11 ended between the second and third waves of data collection.

Following the strategy for assessing the systematic bias introduced by missing data (Cohen and Cohen, 1975), analyses of variance were run to compare the terminated and nonterminated IR's on all the manifest variables for the first and second time periods. The results show that the terminated and non-terminated IR's differ significantly on a number of indicators and that these differences decrease from the first to the second time periods. It would have been desirable then to assess differences in the applicability of the theory across the two types of

have a common origin (Simmel, 1955: 20). Conflicts are resolved temporarily by changing the situations confronting participants or the structure of the IR. These changes, in turn, give rise to new conflicts and result in a continuous need to reconstruct the relations between individuals and their social environment. Thus, balance or stability in one aspect of an IR depends on "imbalances in other social states; forces that restore equilibrium in one respect do so by creating disequilibrium in others" (Blau, 1964: 26).

## RESEARCH METHODOLOGY

### Data Collection Procedures

To test the theory developed above, a longitudinal study was conducted on pairwise relationships that 14 early childhood development (ECD) organizations maintained with 110 other agencies in Texas. Three waves of data were collected, in March 1974, January 1975, and August 1976. In each data collection wave the researchers administered a questionnaire to the 14 ECD agency directors. In this focal agency (FA) questionnaire, respondents answered the same questions for each of between seven to eleven relationships they maintained with other organizations. After these focal-agency questionnaires were completed, the ECD agency directors unanimously consented to our preparing and distributing a questionnaire to the contact persons of all the other member agencies (MA's) on which the ECD agency directors answered questions in their questionnaires. The member-agency questionnaires were then distributed to the designated contact persons and were returned to the researchers in postpaid, self-addressed envelopes. The same procedures were followed in subsequent data collection waves, except that the ECD agency questionnaires were precoded with the same member agencies and respondents that the ECD agency directors chose in the first survey.

develops among organizational parties in an ongoing relationship, since each party struggles to maintain functional autonomy despite their growing interdependence. Formalizing and monitoring a relationship imply establishing some uniform controls on transactions and behavior of those involved that limit autonomy of individual action. "This conflict is inevitable, since both some centralized (or formalized) coordination, and some autonomy of parts are necessary for organized collectivities" (Blau, 1964: 302). This hypothesized relationship of formalization and monitoring on consensus would hold, of course, at the upper ranges of formalization and monitoring where rules and procedures become rigid, and participants are expected to adhere to them with little or no variation.

The other hypothesis is that, over time, client referrals would decrease domain complementarity between organizational parties in an IR. Increasing client referrals between organizations implies that their domains would become increasingly similar. At the upper limits of domain similarity, conflict and competition would become increasingly likely among organizations, and this would decrease their willingness to continue exchanging resources. Thus, where the comparative properties of organizations are no longer perceived as "complementary" but as "territorial invasions," organizations will limit future resource transactions, preferring to initiate transactions with other, more complementary (i.e., less similar) organizations to obtain needed resources.

In conclusion, the theory illustrated in Figure 1 contains forces leading to the creation and growth of an IR and forces leading to the decline of an IR. The dialectical structure of this theory is consistent with the writings of Simmel and Blau, who commonly viewed conflict and incoherence as an inherent quality of collective behavior. Cooperation and antagonism

In summary, the growth of an IR is viewed as a dynamic cyclical process. A need for resources stimulates communications with organizations that have complementary domains, since they are likely to have the needed resources. These communications have the purpose of establishing a formal agreement for financial transactions or informal consensus to refer clients for services. These resources are exchanged incrementally in order to allow participants to observe equity in the IR, develop trust gradually, and commit themselves to becoming increasingly dependent on each other. From this logic comes the hypothesized compound paths between dependence, communications, formalization, consensus, resource flows, norms of equity, and dependence presented in Figure 1, hypotheses 1-8. What may start as an interim solution to a problem to obtain a specific resource may eventually become a long-term interorganizational commitment of resource transactions and a web of interdependencies (Terreberry, 1968), if the process is perceived by the parties to be equitable.

#### The Decline of Dyadic IR's

The above processes for creating and expanding an IR contain the seeds of its disintegration. The seeds of disintegration are that (1) increasing formalization and monitoring in an IR lead to conflict and dissensus among participants, who are struggling to maintain their organizational autonomy in the face of growing interdependence (hypothesis 9), and (2) increasing resource transactions among organizations over time implies that their domains will shift from being complementary to being similar, which increases the likelihood of territorial disputes, conflict, and competition (hypothesis 10).

First, formalization and monitoring decrease consensus. Conflict

and there are no tangible indications of the direct benefits available to an agency (O'Toole et al., 1972).

Thus the growth of an IR is a gradual dynamic process that is continually shaped and recreated by the actions and symbolic interpretations of individuals. IR's are likely to emerge incrementally with small transactions that initially require little trust because they involve little risk. As these transactions are repeated through time and meet basic norms of equity, the participants feel increasingly secure in committing more of their available resources to the IR.

Norms of equity refer to the degree to which each organizational party judges that the other fulfills its commitments and that the relationship is worthwhile, equitable, productive, and satisfying. The concept comes from exchange theory, which emphasizes that participants in a relationship seek: (1) reciprocity, by which one is morally obliged to give something in return for something received (Gouldner, 1959), (2) fair rates of exchange between costs and benefits in a transaction (Blau, 1964), and (3) distributive justice, through which all parties receive benefits that are proportional to their investments (Homans, 1961).

As applied to IR's, these norms of equity are based on the assumption that organizational parties wish to maximize gains and minimize losses when becoming involved in an IR. These gains and losses are generally not calculated in an objective way with a cost-benefit calculus. Instead, as Singlemann (1972) pointed out, costs and benefits are symbolically assessed in terms of the values and meanings that participants assign to them. Thus, as long as the parties to an IR perceive that their monetary transactions or client referrals are equitable, they are willing to increase their dependence on each other and to become more deeply involved in an IR (hypotheses 7 and 8).

The striving for autonomy, however, is counteracted by the monitoring efforts of the funding agency, resulting in the hypothesized positive indirect relationship between monetary transactions and client referrals via monitoring in hypothesis 6. The funding agency, desiring increased impact through efficient use of its scarce resources will advise the funded agency to refer clients requiring idiosyncratic services to other organizations that are better equipped to provide those services. Moreover, the funding agency representatives who do the monitoring are often technical program specialists who have contacts with other organizations in the community and who serve as brokers in arranging client referrals between organizations. Thus, monitoring by a funding agency not only serves to ensure financial contract compliance but also to coordinate services among organizations.

#### The Growth of Dyadic IRs

IR's emerge incrementally, grow with resource transactions that are perceived to be equitable, and develop into a web of interdependencies. The timing of activities and events is a key factor in the emergence and growth of an IR. The case study by O'Toole et al. (1972) was particularly insightful in its description of how an IR emerges as the result of a slow, flexible, developmental process, with many small thrusts of exchanges around specific problems, followed by periods to congeal new developments. O'Toole et al. (1972) emphasized that IRs grow and build on previous small but successful exchanges between agencies. By participating in small moves toward coordination, each agency is able to see the IR's positive aspects and is able to deal with coordination's negative aspects. Further, commitments and formalized arrangements are not developed prematurely, when the extent of an agency's commitment or involvement is still unclear

the needs and services of each client are unique and constantly reinterpreted and reconstructed by the organizational parties. In the case of monetary transactions, however, the collective definition of the situation has been established a priori. As a result, parties entering into financial transactions enter into an institutionalized relationship in which bureaucratic norms prescribe the situation and roles of the parties. Therefore, we expected formalization of agreement to have a direct effect on monetary transactions (part of hypothesis 3), while consensus would have a direct effect on client referrals (part of hypothesis 6).

Monetary transactions have both positive and negative effects on client referrals in an IR. Following Benson's (1975) argument that service delivery considerations are a function of the acquisition of financial resources, we expected monetary transactions to have a prior and positive effect on client referrals. This can be justified on the grounds that a human service organization cannot provide services for long without acquiring financial resources. However, by this logic one does not consider, as Zeitz (1980) has, that contradictions often emerge when different kinds of resources are transacted in an IR.

On the assumption that organizations strive to maintain their autonomy, we should expect that the more successful an organization is in acquiring financial resources, the less it will engage in client referrals with other organizations preferring instead to create its own specialized service units to meet the idiosyncratic needs of its clients. This strategy is possible, of course, only to the extent that a service organization is able to acquire additional financial resources to sustain its idiosyncratic service units. Thus, we hypothesized a negative direct relationship between monetary transactions and client referrals in Figure 1 (hypothesis 6).

Table 4

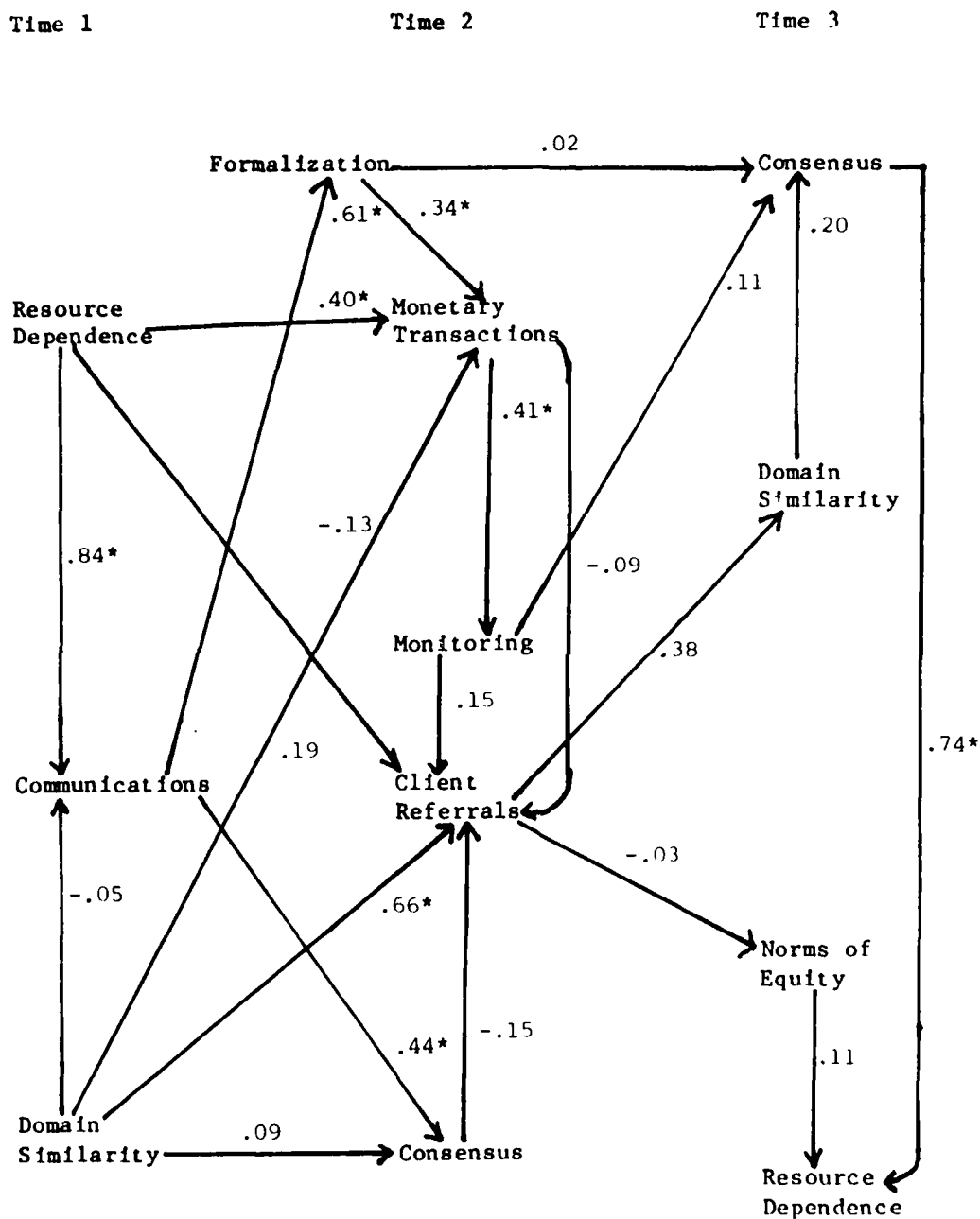
Measurement results for proposed model				
Variable and indicators	Factor loading	Standard error	T-value	Squared multiple correlations*
Resource dependence 1				
1. FA depends on MA	1.0	-	-	.77
2. MA depends on FA	.72	.12	6.13	.33
Domain Similarity 1				
3. FA MA have same services	1.0 <sup>+</sup>	-	-	.38
4. FA MA have same clients	1.19	.18	6.56	.47
Communications 1				
5. Frequent written communications	1.0 <sup>+</sup>	-	-	.61
6. Frequent phone calls	1.32	.15	8.86	.79
Formalization 1				
7. Extent agreement written	1.0 <sup>+</sup>	-	-	.92
8. Extent agreement legal	.94	.08	11.51	.82
Consensus				
9. Agree on service goals	1.0 <sup>+</sup>	-	-	.96
10. Agree on FA methods	.96	.08	11.35	.88
Monetary transactions 2				
11. Degree of money flows	1.0 <sup>+</sup>	-	-	1.0
Client referrals 2				
12. Degree of client referral	1.0 <sup>+</sup>	-	-	1.0
Monitoring 2				
13. Frequency of of site visits	1.0 <sup>+</sup>	-	-	1.0
Resource dependence 3				
14. FA depends of MA	1.0 <sup>+</sup>	-	-	.6
15. MA depends of FA	.82	.18	4.64	.3
Consensus 3				
16. Agree on service goals	1.0 <sup>+</sup>	-	-	.89
17. Agree on FA methods	1.01	.08	12.68	.87
Domain similarity 3				
18. FA MA have same services	1.0 <sup>+</sup>	-	-	.02
19. FA MA have same clients	1.2	.34	3.27	.41
Normas of equity 3				
20. Relationship perceived worthwhile	1.0 <sup>+</sup>	-	-	4.38
21. Relationship perceived effective	.35	.36	.96	-.23

\*The squared multiple correlation represents the amount of variance explained in the indicator due to its relationship with the variable it indicates.

<sup>+</sup>Constrained parameter to fix scale.

Figure 2. Structural parameter estimates for proposed model

Diagram of structural equation model with standardized coefficients



\*|t-value| of unstandardized coefficient greater than 1.96.

Table 5

## Structural parameter results for proposed model

Variable	Unstandardized estimate	Standard error	T-value	Variance explained
Communications 1				.71
Effect of: Resource dependence 1	1.42	.20	6.98	
Domain similarity 1	-.09	.15	-.55	
Formalization 1				.38
Effect of: Communications	.79	.15	5.72	
Consensus 1				.19
Effect of: Communications 1	.29	.07	4.1	
Domain similarity 1	.11	.13	.83	
Monetary transactions 2				.44
Effect of: Resource dependence 1	.84	.22	3.72	
Formalization 1	.33	.09	3.34	
Domain similarity 1	-.26	.19	-1.31	
Monitoring 2				.17
Effect of: Monetary transactions 2	.44	.10	4.33	
Client referrals				.48
Effect of: Resource dependence 1	.47	.32	1.48	
Domain similarity 1	1.66	.28	5.93	
Consensus 2	-.33	.22	-1.47	
Monetary transactions 2	-.11	.15	-.74	
Monitoring 2	.17	.10	1.64	
Domain similarity 3				.39
Effect of: Client referrals 2	.11	.06	1.73	
Consensus 3				.05
Effect of: Formalization 1	.01	.07	.16	
Monitoring 2	.07	.07	1.02	
Domain similarity 3	.39	.26	1.51	
Equity 3				.01
Effect of: Monetary transactions 2	.04	.03	1.21	
Client referrals 2	-.03	.02	-1.18	
Resource dependence 3				.58
Effect of: Consensus 3	.27	.04	7.02	
Equity 3	.02	.04	.64	
Autocorrelation between error terms:				
Resource dependence 1 and 3	.16	.06	2.82	
Domain similarity 1 and 3	.37	.19	1.97	
Consensus 2 and 3	.43	.17	2.62	
$\chi^2$	306.81			
degree of freedom	= 107			
probability	= 0.00			

decided, therefore, in an exploratory way, how the relationships evolved between the organizations in this sample. Since this represents exploratory post-hoc data analysis, we admittedly forgo the ability to generalize results, although, they may suggest how the theory might be modified for future research.

The following procedure was used to derive the revised model. First, the paths in the theory shown in Figure 1 that were not found to be significant were deleted. Second, because of their poor measurement properties, norms of equity and domain similarity in the third period were not included in the exploratory model. Third, new parameters, called modification indices, were added to the model, using LISREL output. Modification indices indicate roughly how much the overall model's chi-square value would decrease, and therefore improve the fit of the model to the data, if a parameter is estimated that had not been a part of the model. New parameters were entered into the model if their modification index value was three or greater. The t-value of each new parameter estimate was examined for its significance. No parameter with a t-value of less than 1.96 (Bagozzi, 1980) was kept as a part of the model. (As in any forward selection procedure, it was possible that the inclusion of a new path rendered the estimate of an old path insignificant.)

Parameters to be included in the model were chosen, first, from the possible causal paths among the latent variables, second, from the possible correlations among the error terms of the latent variables, third, from the possible correlations among the error terms of the manifest variables, and, finally, from possible correlations between the manifest and latent variables. Within each of these sets of parameters, those with the largest modification index were chosen. The order of adding new paths to the model may not have been optimal; no search was taken

back through the parameter choices made to determine if a smaller global chi-square could be obtained using a different sequence. Finally, once the revised model had been created by exhausting the modification indices, a new null model was created, and an incremental fit index was calculated.

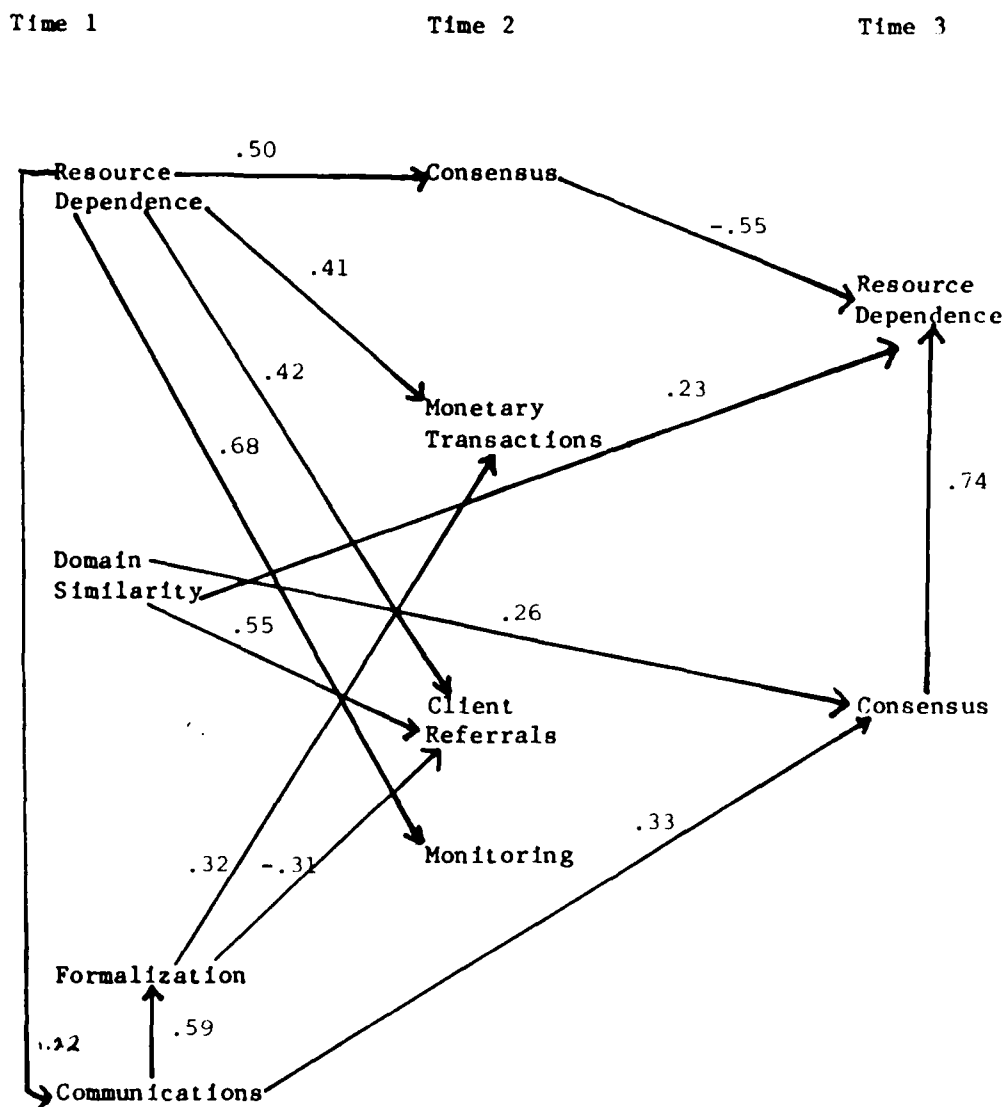
The revised model is shown in Tables <sup>6 and 7</sup> ~~8~~ and Figure 3. The test of the null model for the covariance matrix has a chi-square value of 1147.94 and the revised model a value of 111.52. The revised model has an incremental fit index of .903, a marginal but acceptable level of practical significance. The revised model varies in a number of ways from the original proposed theory.

Although in the proposed model, resource dependence was hypothesized to be an important force in the development of IR's, the revised model shows it to be even more significant. Perceptions of dependence have a strong positive influence on subsequent resource flows, as predicted. Note that the effect of resource dependence at t1 on client referrals at t2 is confirmed in the revised model but not in the test of the original proposed model. Resource dependence at t1 also influences consensus at t2 directly, but not through communications, whose effect disappears when resource dependence is included as a predictor. Similarly, the influence of monetary transactions on monitoring becomes insignificant when the direct effect of resource dependence at t1 on monitoring at t2 is estimated. As a result, the hypothesized dialectic between monetary and client transactions is disconfirmed.

The strong positive effect of formalizing IR's at t1 on monetary transactions at t2 is balanced in the revised model by the negative effect of formalization on client referrals. This polarizing characteristic of formalization is analogous to the resource flow dialectic originally proposed but is removed from it one level, since

Figure 3. Structural parameter estimates for revised model

Diagram of structural equation model with standardized coefficients\*



\*For all estimates |t-value| > 1.96

Table 6

## Measurement result for revised model

Variable and indicators	Factor loading	Standard error	T-value	Squared multiple correlations *
Resource dependence 1				
1. FA depends on MA	1.0 <sup>+</sup>	-	-	.75
2. MA depends on FA	.68	.09	6.87	.30
Domain Similarity 1				
3. FA MA have same services	1.0 <sup>+</sup>	-	-	.57
4. FA MA have same clients	.87	.18	4.91	.27
Communications 1				
5. Frequent written communications	1.0 <sup>+</sup>	-	-	.63
6. Frequent phone calls	1.28	.14	9.32	.79
Formalization 1				
7. Extent agreement written	1.0 <sup>+</sup>	-	-	1.0
8. Extent agreement legal	.87	.05	17.47	.74
Consensus				
9. Agree on service goals	1.0 <sup>+</sup>	-	-	1.0
10. Agree on FA methods	.93	.04	23.29	.85
Monetary transactions 2				
11. Degree of money flows	1.0 <sup>+</sup>	-	-	1.0
Client referrals 2				
12. Degree of client referral	1.0 <sup>+</sup>	-	-	1.0
Monitoring 2				
13. Degree of site visits	1.0 <sup>+</sup>	-	-	1.0
Resource dependence 3				
14. FA depends of MA	1.0 <sup>+</sup>	-	-	.54
15. MA depends of FA	.94	.14	6.68	.40
Consensus 3				
16. Agree on service goals	1.0 <sup>+</sup>	-	-	1.0
17. Agree on FA methods	.92	.05	17.69	.75

\*See Table 4.

+Constrained parameter to fix scale.

Table 6 (cont.)

The error terms that covaried significantly ( $T > 1.96$ )

Error terms for indicators:	Unstandardized estimates	Standard error
1. 1 and 15	-.39	.06
2. 1 and 17	-.12	.05
3. 2 and 3	.33	.11
4. 2 and 7	.22	.09
5. 2 and 10	-.10	.04
6. 2 and 14	.16	.05
7. 2 and 16	.34	.07
8. 3 and 7	.29	.12
9. 4 and 6	.71	.22
10. 4 and 15	.29	.09
11. 8 and 13	.47	.19
12. 8 and 15	.19	.07
13. 11 and 14	.21	.09
14. 11 and 15	-.31	.11

\*See Table 4.

+Constrained parameter to fix scale.

Table 7

## Structural parameter estimates for revised model

Variable	Unstandardized estimate	Standard error	T-value	Variance explained
Communication 1				.52
Effect of: Resource dependence 1	1.22	.18	6.91	
Formalization 1				.35
Effect of: Communications 1	.77	.13	5.9	
Consensus 2			.25	
Effect of: Resource dependence 1	.59	.11	5.46	
Monetary transactions 2				.38
Effect of: Resource dependence 1	.84	.19	4.22	
Formalization 1	.29	.08	3.65	
Client referral 2				.47
Effect of: Resource dependence 1	1.07	.23	4.71	
Domain similarity 1	1.41	.27	5.31	
Formalization 1	-.35	.10	-3.43	
Monitoring 2				.46
Effect of: Resource dependence 1	1.53	.18	8.28	
Resource dependence 3				.47
Effect of: Domain similarity 1	.12	.06	1.99	
Consensus 2	-.25	.06	-4.5	
Consensus 3				.17
Effect of: Domain similarity 1	.39	.15	2.65	
Communications 1	.29	.09	3.28	

## Covariances among error terms for latent variables

	Unstandardized estimates	Standard error	T-value
1. Resource dependence 1 and 3	.39	.07	5.89
2. Consensus 2 and 3	.62	.16	3.98
3. Formalization 1 and Consensus 3	-.55	.24	-2.23

$\chi^2$  111.52  
 degree of freedom 96  
 probability = .133

client referrals are negatively influenced not by the flow of money directly but by formalization--one of the determinants of monetary transactions.

The negative effect of formalization at t1 on consensus at t2 was not confirmed in the test of the original model; however, in the revised model the error terms of formalized relations and consensus at t3 are negatively correlated. This result indicates that unknown factors associated with both formalization and consensus affect them in opposite ways. Domain similarity at t1 also leads to continued perceptions of resource dependence at t3, both directly and indirectly, through consensus.

The new information the revised model provides about formalization and consensus is only part of the complex picture of consensus as a single aspect of coordination. First, resource dependence at t1 determines consensus at t2, eliminating the effect of communications. Second, communications at t1 has a positive influence on consensus at t3 but not consensus at t2. Last, consensus at t2 affects resource dependence at t3 negatively, the direction opposite to the effect of consensus at t3. These results indicate that, although autocorrelated across time, consensus should be thought of developmentally since it is determined by and influences other variables differently across time. A full theory of how the nature of consensus changes over time remains to be developed.

Finally, the revised model includes 14 correlated measurement-error terms. These measurement-error correlations point to specification problems in the construction of the latent variables. Significantly, 11 of the 14 correlations involve indicators of resource dependence, measured in either the first or third time period. Consequently, although the reliability of resource dependence as a construct in both periods was

adequate, it may have affected the estimates of the structural equation model. The sensitivity of parameter values in the structural equation model to correlated measurement error was tested by estimating the model with and without the correlations specified. No significant difference in the structural equation estimates was found, although, of course, the fit to the data without the measurement error correlations was not as good.

#### DISCUSSION

The revised model is simpler and, at the same time, more complex than the original theory. The revised model is simpler in that resource dependence at t1 dominates the generation of both consensus and resource transactions at t2. The revision is more complicated because of unexpected lags between variables, the different roles of consensus over time, the modified role of formalization as an influence on IR decline, and the stronger impact of initial domain similarity on subsequent IR developments. Also, because of measurement problems, two constructs, domain similarity at t3 and norms of equity at t3, were dropped from the model. Although a substantial number of correlated measurement errors were found, predominantly involving the resource dependence indicators, these correlations did not alter in any important way the estimates in the structural equations. The following implications can be drawn from the results for the way agencies mobilize coordination with others.

First, the perceived need for resources to achieve organizational goals is clearly the most important factor that stimulates interorganizational coordination. Resource dependence at t1 influenced the development of interorganizational communications at t1 and consensus, monitoring, monetary transactions, and client referrals at t2. Significantly, resource dependence was not affected by monetary or client

transactions in the previous period; perceptions of dependence lead to increased resource flows but not the reverse. Thus, as Guetzkow (1966) noted, the roots of interorganizational activity are internal to each organization. IRs are largely stimulated by perceptions of need for resources from other organizations.

Second, the pattern of interorganizational coordination depends on the kind of resources being coordinated. IRs based on monetary transactions tend to have an impersonal and formalized mode of coordination, while client referrals reflect a more personal and informal coordination pattern. Similar findings were observed by Hall et al. (1977) and Van de Ven, Walker, and Liston (1979) in their cross-sectional IR studies, and by Van de Ven, Koenig, and Delbecq (1976) in their study of coordination within organizational units. However, this longitudinal study provides temporal insight into the development of these different coordination patterns which cross-sectional studies can not provide.

The ECD agencies studied here mobilized IR's, to a large extent, on existing perceptions of need and commonality. Resource dependence had its greatest and most immediate affect on stimulating interorganizational communications at time 1, which in turn, had its most immediate and direct affect on formalization of the IRs. However, formalized relations at time 1 had direct positive effects on monetary transactions but equally direct negative effects on client referrals at time 2. Thus, while greater communications facilitate both types of coordination, it is clear that communication has an indirect formalizing effect on monetary transactions, and an indirect informalizing effect on client referrals.

The developmental pattern for the more personal consensually-based coordination mode is less clear and direct. Domain similarity,

communications, and resource dependence contribute to building consensus by parties to the terms of their relationship. Client referrals in time 2 were largely stimulated by greater resource dependence and domain similarity and lower formalization at time 1. Domain similarity also affected consensus at time 3, and both had significant positive effects on resource dependence at time 3. In addition communications at time 1 influenced consensus at time 3 -- an effect that lagged one period longer than originally hypothesized.

From these findings we infer that client referrals were based on a more personal goal congruence mode of coordination than were monetary transactions because (1) domain similarity, which is directly associated with consensus, directly affects client referrals and not monetary transactions, (2) the role of communications in time 1 was clearly not to establish formalized procedures for subsequent client referrals, but (3) to engage incrementally in client referrals and to allow consensus on terms of the relationship to lag and emerge from the discussions about treatments of specific clients that were referred. Monetary transactions, being clearly measurable and analyzable, are coordinated through formalized contractual arrangements. The less measurable and analyzable client referrals tend to be coordinated through less formalized and more personal means which rely on shared or complimentary missions in treating clients.

Third, the complex role of consensus or conflict between IR parties, in the development of coordination between organizations deserves greater elaboration. Consensus was not related in predicted ways to the other dimensions of coordination over time. Not only were consensus at t2 and t3 predicted differently, but their effects on resource dependence had opposite

signs. Apparently prior goal agreement reduced perceptions of dependence at t3, whereas concurrent goal agreement increased these perceptions. One explanation for this incongruous result is that mixed signals may have emerged in the establishment of relationships. The data suggest that IR's develop in response to a perceived need for resources. This dependence stimulates communications. Presumably, consensus is achieved at t2 at the broadest level on general goals. However, as the parties begin to negotiate specific means or methods for conducting transactions, inconsistencies in the assumptions brought to the relationship begin to emerge. This latent conflict leads to a drive for greater autonomy, i.e., less resource dependence. This may explain why there is a negative relationship between consensus at t2 and resource dependence at t3. However, with the passage of time, mixed signals are reintegrated and rationalized by the parties involved and may lead them to a willingness to accept the IR for what it is, subsequently enabling the parties to increase their dependence on each other again.

#### CONCLUSION

Perhaps the most important aspect of the present study is its longitudinal nature. Without panel data, obviously, neither the significance of the initial IR states for subsequent development nor the complexity of consensus over time would have been discovered. Longitudinal data make a particular kind of causal inference possible, and it is reassuring that the relationships in the revised model flow along the time line so that no retrospective effects occur. Furthermore, the multiple-indicator structural equation model that fits the data well provides a substantial amount of information about the underlying processes of coordination mobilization, as represented by the variables

LIST 4  
MEDICAL

Commanding Officer  
Naval Health Research Center  
San Diego, CA 92152

Psychology Department  
Naval Regional Medical Center  
San Diego, CA 92134

Commanding Officer  
Naval Submarine Medical  
Research Laboratory  
Naval Submarine Base  
New London, Box 900  
Groton, CT 06349

Commanding Officer  
Naval Aerospace Medical  
Research Lab  
Naval Air Station  
Pensacola, FL 32508

Program Manager for Human  
Performance (Code 44)  
Naval Medical R&D Command  
National Naval Medical Center  
Bethesda, MD 20014

Navy Health Research Center  
Technical Director  
P.O. Box 85122  
San Diego, CA 92138

LIST 3  
NAVMAT & NPRDC

NAVMAT

Program Administrator for Manpower,  
Personnel, and Training  
MAT-0722  
800 N. Quincy Street  
Arlington, VA 22217

Naval Material Command  
Management Training Center  
NAVMAT 09M32  
Jefferson Plaza, Bldg #2, Rm 150  
1421 Jefferson Davis Highway  
Arlington, VA 20360

Naval Material Command  
Director, Productivity Management Office  
MAT-00K  
Crystal Plaza #5  
Room 632  
Washington, DC 20360

Naval Material Command  
Deputy Chief of Naval Material, MAT-03  
Crystal Plaza #5  
Room 236  
Washington, DC 20360

Naval Personnel R&D Center  
Technical Director  
Director, Manpower & Personnel  
Laboratory, Code 06  
Director, System Laboratory, Code 07  
Director, Future Technology, Code 41  
San Diego, CA 92152

(4 copies)

Navy Personnel R&D Center  
Washington Liaison Office  
Ballston Tower #3, Room 93  
Arlington, VA 22217

LIST 2  
OPNAV

Deputy Chief of Naval Operations  
(Manpower, Personnel, and Training)  
Head, Research, Development, and  
Studies Branch (OP-01B7)  
1812 Arlington Annex  
Washington, DC 20350

Director  
Civilian Personnel Division (OP-14)  
Department of the Navy  
1803 Arlington Annex  
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The need to examine how interorganizational coordination develops is increasing, as the problems of establishing a balance between cooperation and competition between organizations become more obvious. This study has focused on a relatively small but instructive setting to examine basic questions of how coordination is mobilized. The careful investigation of IR's in other settings will undoubtedly expand and refine the results presented here.

specified in the various time periods.

However, the results for any study combining confirmatory and exploratory approaches cannot be generalized using the sampling assumptions on which confirmatory techniques are based (Cliff, 1983). The revised model as a whole in the present research may therefore be idiosyncratic to the data from which it was developed. Parts of the model, however, may be considered valid topics for future research. Thus for example, the measurement-error structure of resource dependence and the shift in the role of consensus over time should be investigated further to establish the range and conditions of their generalizability.

This study focused on the mobilization coordination efforts of 14 new ECD organizations who's survival required them to obtain financial support and client referrals from other organizations in their local communities. They were each told in 1973 that sponsorship by a state agency would discontinue after 1976. Given this context, the research findings should not be generalized beyond the initial startup and subsequent developmental activities of relationships among new human service organizations. Thus, the research cannot be replicated by pooling longitudinal data or by entering an interorganizational setting among organizations that are at a different stage in their life cycles.

Furthermore, the present model pertains to interorganizational relationships in which money and client flows are important transactions and whose development is mandated by a time schedule set by an external funding authority. Although monetary flows are endemic to any price-governed market, client referrals are generally specific to service organizations. More generally, transactions involving other kinds of resources in an IR would undoubtedly alter the way coordination develops, given the different patterns that emerged in the present study.

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